



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,417	07/18/2003	Celine Mas	S01022.81026	4150

23628 7590 12/08/2005  
WOLF GREENFIELD & SACKS, PC  
FEDERAL RESERVE PLAZA  
600 ATLANTIC AVENUE  
BOSTON, MA 02210-2211

EXAMINER

HSU, JONI

ART UNIT PAPER NUMBER

2671

DATE MAILED: 12/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/622,417	Applicant(s) MAS ET AL	
	Examiner Joni Hsu	Art Unit 2671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4 and 5 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

67

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Specification***

2. The disclosure is objected to because of the following informalities: According to MPEP § 608.01 (m), the present Office practice is to insist that each claim must be the object of a sentence starting with "I (or we) claim," "The invention claimed is" (or the equivalent). The phrase "Claims" is not considered equivalent to these appropriate phrases. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Richards (US006756976B2) in view of Glennon (US006359654B1).

Richards describes a method for displaying an image by activation of pixels of an array screen based on an image stored in digital form in memory point rows of a frame memory, comprising a normal display mode comprising, for the display of a frame, the steps of: (a) providing a succession of row addresses associated with rows of the frame memory (310, Figure 2a) (Col. 5, line 65-Col. 6, line 4; Col. 13, lines 45-51); (b) successively reading the states of memory points of the rows associated with the row addresses (Col. 5, line 65-Col. 6, line 4; Col. 2, lines 43-48); and (c) activating, for each row address, pixels of a line associated with the row address based on the read states of the row associated with the address (Col. 2, lines 43-48), further comprising a stand-by mode comprising replacing step (c) with the steps of: (d) providing, by a dedicated circuit (500, Figure 15), a cyclic succession of offset values (Col. 11, lines 29-50; Col. 13, lines 52-67); and (e) for each row address of the frame memory, and activating pixels of a screen line associated with the row address based on the read states of the frame memory row associated with the address offset by a same offset value (Col. 11, lines 29-50; Col. 13, lines 52-67).

However, Richards does not teach that the cyclic succession of offset values is provided at a frequency proportional to the display frequency. However, Glennon describes that the cyclic succession of offset values is provided at a frequency proportional to the display frequency (Col. 3, lines 51-65; Col. 3, lines 30-33).

It would have been obvious to one of ordinary skill in this art at the time of invention by applicant to modify the device of Richards so that the cyclic succession of offset values is provided at a frequency proportional to the display frequency as suggested by Glennon because Glennon suggests that this is needed in order to achieve the appearance of smooth motion (Col. 3, line 66-Col. 4, line 3).

6. Claims 2, 4, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richards (US006756976B2) in view of Glennon (US006359654B1), further in view of Leung (US005900887A).

7. With regard to Claim 2, Richards describes a device for displaying an image on an array screen comprising a frame memory (310, Figure 2a) comprising memory points arranged in rows and in columns (Col. 5, lines 61-65; Col. 13, lines 45-51; Col. 17, lines 47-49); a write means for storing in the frame memory an image in digital form (Col. 2, lines 43-48; Col. 3, lines 4-6); a read means for reading the states of the memory points of a row of the frame memory at a determined row address (Col. 3, lines 39-42); a row driver (402, Figure 3) for selecting a screen LINE based on the determined row address (Col. 3, lines 31-34); and a column driver for activating pixels of the selected line based on the states of memory points read by the read.

means, further comprising a dedicated control circuit (500, Figure 15) for providing a cyclic succession of offset values (Col. 11, lines 29-50; Col. 13, lines 52-67); and a dedicated address circuit (406, Figure 9) receiving the address of the row read by the read means (Col. 3, lines 39-42) and transmitting to the row driver a new address (Col. 3, lines 31-34) corresponding to the address of the read row offset by a same offset value (Col. 11, lines 29-50; Col. 13, lines 52-67).

However, Richards does not teach that the cyclic succession of offset values is provided at a frequency proportional to the display frequency. However, Glennon describes that the cyclic succession of offset values is provided at a frequency proportional to the display frequency (Col. 3, lines 51-65; Col. 3, lines 30-33), as discussed in the rejection for Claim 1.

However, Richards and Glennon do not teach a column driver for activating pixels of the selected line based on the states of memory points. However, Leung describes a column driver for activating pixels of the selected line based on the states of memory points (Col. 2, lines 2-9, 64-67).

It would have been obvious to one of ordinary skill in this art at the time of invention by applicant to modify the devices of Richards and Glennon to include a column driver for activating pixels of the selected line based on the states of memory points as suggested by Leung because Leung suggests the advantage of not having to write each pixel location, but can write larger blocks of pixel at the same time (Col. 1, lines 35-42; Col. 2, lines 2-9, 64-67).

8. With regard to Claim 4, Richards describes that the dedicated address circuit is an adder adapted to adding the offset value to the address of the read row (Col. 11, lines 41-50).

Art Unit: 2671

9. With regard to Claim 5, Richards describes that the screen is a screen with light-emitting diodes (Col. 2, lines 32-36).

***Allowable Subject Matter***

10. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

11. The prior art taken singly or in combination do not teach or suggest the device of Claim 2 wherein the dedicated state circuit is a shift register, in which are written the states of memory points provided by the read means, adapted to performing an offset by a determined number of bits on the states, as recited in Claim 3.

12. The closest prior art (Cairns US006806854B2) teaches a shift register (25, Figure 8), in which are written the states of memory points (Col. 8, lines 10-32). However, Cairns does not teach that the shift register is adapted to performing an offset by a determined number of bits on the states.

***Prior Art of Record***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cairns (US006806854B2) teaches an active matrix display comprising an active matrix of N rows and M columns of pixels and a driver for driving the pixels (Col. 1, lines 14-27).

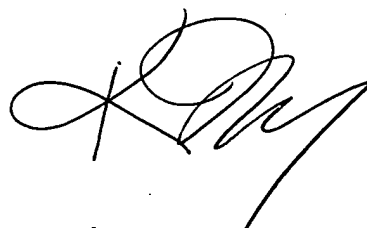
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joni Hsu whose telephone number is 571-272-7785. The examiner can normally be reached on M-F 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on 571-272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JH



**Kee M. Tung**  
Primary Examiner